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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,908	02/28/2002	Will G. Fetherolf	10015361-1	1658

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EXAMINER
LIANG, LEONARD S

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/086,908	FETHEROLF, WILL G.	
	Examiner	Art Unit	
	Leonard S Liang	2853	

-- The MAILING DATE of this communication appears on th cov r sh et with the corresp ndence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1,4-18 and 22-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-18 and 22-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 4-5, 7-10, 12-15, 17, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US Pat 5731829) in view of Kikuchi (US Pat 5929894).

Saito et al discloses:

- {claim 1} A media processing device (figure 23B); a media processing engine (figure 23B, reference 409; column 21, lines 5-17); means for supporting the print engine relative to the vertical structure (figure 23B, reference 575)

FIG. 23A

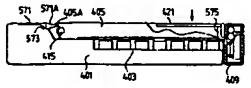
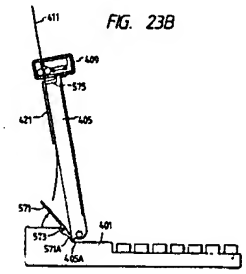


FIG. 23B



- {claim 4} the media processing engine employs a straight-through media path (figure 23B, reference 411, 421), having a media input on the top of the media processing engine (figure 23B, input drawn in and wherein the media output is on the bottom of the print engine (figure 23B, output drawn in)

- {claim 5} the media is initially fed into the media input by gravity force (figure 23B, reference 411; column 21, lines 4-6; inherent since media is going downwards; gravity pulls downwards)
- {claim 7} means for supporting includes a support bracket (figure 23B, reference 575; operating arm serves as support bracket; Merriam-Webster's Collegiate Dictionary Tenth Edition teaches that a bracket is "a fixture projecting from a wall or column", page 137) and the support bracket is adopted for support from the vertical surface by a means for fastening the support bracket to the vertical structure (figure 23B, reference 575)
- {claim 8} the vertical structure is a parapet wall (figure 23B, reference 405; Merriam-Webster's Collegiate Dictionary Tenth Edition teaches that parapet is "a low wall or railing to protect the edge of a platform...", page 841; here wall 405 is construed as a parapet wall because it keeps the printer unit 409 from crashing down onto the body 401 (i.e. platform), thus protecting the platform) and the support bracket (figure 23B, reference 575) is formed as a hook-like structure (figure 23B, reference 575; bracket has been colored to highlight its distinguishing hook shape) to engage the top of the parapet wall for support therefrom (figure 23B, reference 575)
- {claim 9} the media receives and supports the discharged media in a vertical direction (figure 23B, reference 571)
- {claim 10} the discharged media is transferred from the media output to the media receiver by gravity force (figure 23B; output drawn in, reference 571; inherent because recording medium is going downwards; gravity pulls downwards)
- {claim 12} the support bracket is rotatably coupled to the print engine (figure 23 A-B), between a first position adapted for support of the print engine by hanging (Merriam-Webster's Collegiate Dictionary Tenth Edition teaches that a definition of hang is "to apply to a wall", page 526) from the vertical structure (figure 23B, reference 405, 409, 575), and a second position adapted for inclined support of

the print engine on the horizontal structure (figure 23A, reference 405, 415, 509, 575)

- {claim 13} a media receiver (figure 23B, reference 571) coupled to the print engine (through wall 405), rotatable between a vertical position between a vertical position below the print engine for receiving the media when the print engine is supported from the vertical structure (figure 23B, reference 571), and a horizontal position, substantially parallel to the horizontal structure for receiving media when the print engine is supported on the horizontal structure (figure 23A, reference 571; column 21, lines 12-30; when wall 405 is lowered from vertical to horizontal position, media receiver 571 is transformed into a substantially parallel horizontal portion)
- {claim 14} A printing device adapted for support from a vertical structure or a horizontal structure (figure 23A-B); a print engine (as taught in claim 1); a support bracket coupled to the print engine, rotatable between a first position adapted for support of the print engine by hanging from the vertical structure, and a second position adapted for inclined support of the print engine on the horizontal structure (as taught in claim 12); a media receiver coupled to the print engine, rotatable between a vertical position below the print engine for receiving the media when the print engine is supported from the vertical structure, and a horizontal position, substantially parallel to the horizontal structure, for receiving media when the print engine is supported on the horizontal structure (as taught in claim 13)
- {claim 15} the print engine employs a straight-through media path, having a media input on the top of the print engine, and wherein the media output is on the bottom of the print engine (as taught in claim 4)
- {claim 17} the vertical structure is a parapet wall and wherein the support bracket is formed as a hook-like structure to engage the top of the parapet wall for support therefrom (as taught in claim 8) when the support bracket is in the first position and wherein the hook-like structure provides the base of support on

the horizontal structure while the support bracket is in the second position (figure 23A, reference 409, 575)

- {claim 22} a media receiver coupled to the media processing engine and positioned to receive discharged media therefrom
- {claim 24} the media processing engine further includes a developing unit (column 24, lines 1-35)
- {claim 25} the media processing engine further includes a toner cartridge (column 6, lines 30-39)
- {claim 27} the media processing engine further includes a fusing unit (column 24, lines 1-35; i.e. thermal transfer)
- {claim 28} A method for processing media (figure 23B); suspending a printer in a vertical orientation (figure 23B, reference 409); gravity feeding media to the printer (as taught in claim 5); fusing an image on the media (column 24, lines 1-35; i.e. thermal transfer); ejecting the media from the printer (figure 23B)

Saito et al differs from the claimed invention in that it does not disclose:

- {claims 1 and 14} a photoconductive drum
- {claim 23} a laser scanning unit
- {claim 26} intermediate transfer drum
- {claim 28} laser printer; photoconductive drum

Kikuchi discloses:

- {claims 1 and 14} a photoconductive drum (figure 1, reference 16)

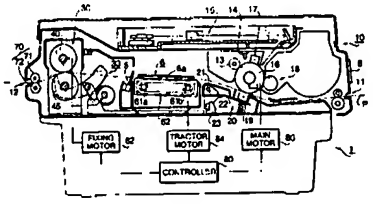


FIG. 1

- {claim 23} a laser scanning unit (figure 1, reference 15)
- {claim 26} intermediate transfer drum (figure 1, reference 16)
- {claim 28} laser printer; photoconductive drum (figure 1, reference 15-16)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Kikuchi into the invention of Saito et al. The motivation for the skilled artisan in doing so is to gain the benefit of avoiding the problems associated with ink jet printing such as nozzle clogging and ink smear; the advantages of using laser printing and a photoconductive drum are well known to one of ordinary skill in the art. Furthermore, Saito et al expressly teaches that "the present invention can be embodied regardless of the type of the recording apparatus in embodiments to be described hereinafter. That is, the following embodiments are respectively able to employ another type printer as well as the printer to be described in each embodiment (column 24, lines 1-6); thus it is implied that any printer, such as the laser printer disclosed by Kikuchi, can be used as the printing unit of Saito et al.

2. Claims 6, 11, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (US Pat 5731829) in view of Kikuchi (US Pat 5929894), as applied to claims 1 and 14, and further in view of Silverbrook et al (US Pat 645055).

Saito et al, as modified, differs from the claimed invention in that it does not disclose:

- {claims 6 and 16} the depth of the media processing engine is smaller than the height and the width
- {claims 11 and 18} the media receiver orders a plurality of media received from the media output by gravity force

Silverbrook et al discloses:

- {claims 6 and 16} print media processing engine (figure 2, reference 12) where the depth is smaller than the height and the width (figure 2, reference 12)

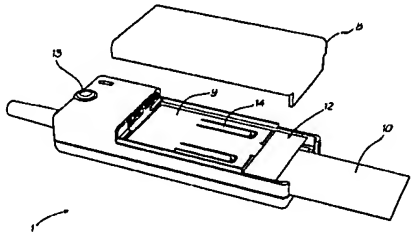


FIG. 2

- {claims 11 and 18} media receiver orders a plurality of media (figure 3, reference 9)

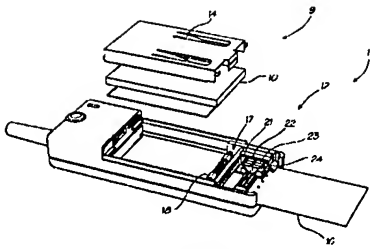


FIG. 3

received from the media output by gravity force (figure 4, reference 10, 17; inherent because media exits in downward direction and gravity has downward pull)

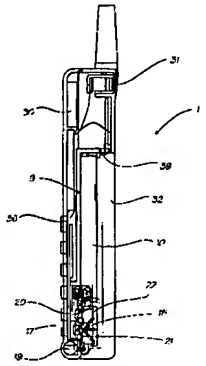


FIG. 4

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Silverbrook et al into the invention of modified Saito et al so that the depth of the media processing engine is smaller than the height and the width and the media receiver orders a plurality of media received from the media output by gravity force. The motivation for the skilled artisan in doing so is to gain the benefit of having a compact printer (column 1, lines 13-14) and being able to print a plurality of sheets (column 1, lines 30-31).

Response to Arguments

3. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S Liang whose telephone number is (703) 305-4754. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

lsl LSL
June 18, 2003

JUDY NGUYEN
PRIMARY EXAMINER